

Usage of Benchmarking as Organizational Development Technique in Educational Organizations

Damla AYDUĞ¹

Anadolu University, Eskişehir, Turkey

Beyza HİMMETOĞLU²

Anadolu University, Eskişehir, Turkey

Esmahan AĞAOĞLU³

Anadolu University, Eskişehir, Turkey

Abstract

In this study, benchmarking technique, which is one of the organizational development techniques, and its use in education were reviewed. Firstly, history of benchmarking, benchmarking types, stages of the benchmarking process, advantages and disadvantages of benchmarking technique were examined. Then, it was investigated on which subjects benchmarking technique can be used in educational organizations. As a result of literature review, it was found that benchmarking technique can be used in many different areas such as evaluating the organization, determining the vision, improving administrative processes, developing teaching methods, improving financial management, and using technology more effectively and efficiently in educational organizations. Therefore, it has been concluded that benchmarking is a very useful tool that can provide both practical and theoretical benefits to educational organizations.

Submitted
21 October 2020

Revised
9 November 2020

Accepted
10 November 2020

Keywords:
Benchmarking,
Educational
organizations,
Organizational
development

Suggested Citation:

Ayduğ, D., Himmetoğlu, B., and Ağaoğlu, E. (2020). Usage of benchmarking as organizational development technique in educational organization. *International Journal of Academic Research in Education*, 6(1), 16-33. DOI: 10.17985/ijare.814287

INTRODUCTION

¹ Anadolu University, Faculty of Education, Department of Educational Sciences, damlaaydug@anadolu.edu.tr

² Anadolu University, Faculty of Education, Department of Educational Sciences, beyzahimmetoglu@anadolu.edu.tr

³ Anadolu University, Faculty of Education, Department of Educational Sciences, esagaogl@anadolu.edu.tr

In management literature, benchmarking is defined as the process of searching the best practices and adapting them to organizations. Benchmarking, which is considered a managerial tool, is generally the adaptation process of an organization by identifying best practices within itself or in other organizations in order to increase its performance level (Stapenhurst, 2009). It is not a new approach for an organization to compare its own activities and the goals it has achieved as a result of these activities with other competitors or compare them with past values. However, the benchmarking technique offers a much broader perspective on management compared to such older implementations (Genç, 2007).

Benchmarking is a process in which organizations aim to find the best, learn and develop by adapting what they have learned to their own processes (Kalder, 1997). By benchmarking, organizations observe their current situation and make predictions about their future performance levels. In addition, through mutual sharing of experience and knowledge between organizations, organizations are informed in a way similar to human learning processes. For this reason, benchmarking both sets the stage for organizations to compete and creates synergies because it provides inter-functional cooperation (Kalder, 1997). In addition, benchmarking is a continuing search to make things better and more qualified and follow the most successful examples in this business (Koçel, 2014). Therefore, benchmarking is a continuous process. When considering that the pursuit of perfection and continuous healing is a process that will not end, it can be said that benchmarking is not a method that can be applied and abandoned once, but a dynamic process that constantly renews itself (Akat et al., 1999).

Organizational goals are the basis for ensuring organizational development in the benchmarking process. In particular, organizations use the benchmarking process to identify goals and determine how these goals can be achieved. It is impossible for organizations to survive unless they understand the important points of competition and monitor the best organization in the same industry (Karalar and Sınmaz, 1998). According to Fisher (1998), the reasons why organizations use the benchmarking technique is to determine the differences between themselves and competing institutions, to set the highest possible standards in the industry, to learn from the best in their classes, to create synergy from new ideas obtained and to ensure focusing on performance.

In terms of many ways such as defining goals or increasing effectiveness, educational organizations are among the organizations that benchmarking technique can be appropriate to use. Owing to the fact that educational organizations are responsible for educating individuals who will shape the future of societies, it is crucial to fulfill the organizational goals for them. Hence, organizational evaluation technique which they use, has the same vitality on development of society. For this reason, many techniques such as strategic planning, accreditation, 360-degree performance evaluation, Total Quality Management have been used for the development of educational organizations. In this sense, it is believed that one of the techniques that educational organizations could benefit from to provide competitive advantage and achieve the best is the benchmarking technique.

Purpose of the study

This study examines the usability of benchmarking, as an organization development technique in educational organizations. For this purpose, firstly history of benchmarking, types of benchmarking, stages of the benchmarking process, advantages and disadvantages of the benchmarking process was reviewed, and then the subjects which the benchmarking technique can be used in educational organizations was examined.

THEORETICAL FRAMEWORK

The concept of “Benchmarking” comes from benchmark. A benchmark is a triangulation sign that surveyors on land make on a rock, wall, or building, and those who make measurements on land then use this sign as a reference point to make other measurements. In 1970, the benchmark concept moved away from its technical meaning and began to be used in the field of management (Uzun & Yelkikalan, 1997). For organizations, benchmarking means more than the comparison of an organization itself with a better organization. It can be said that the concept of comparison and benchmarking should not be confused, because benchmarking not only includes comparing but also adapting good practices to the organization. In the literature, there exists lots of definitions of benchmarking. According to Camp (1992), benchmarking is the process of continuously measuring products, services, and applications compared to the strongest competitors or industry leaders. Grayson (1992) defines benchmarking as continuous comparison of the organization's own processes with the best organizations from within or outside the sector. Freytag and Hollensen (2001) define benchmarking as a management technique to measure the strategies and performance of organizations by comparing them with the best in their class, both within and outside the organization.

In order to understand what benchmarking technique is, it is necessary to first address other concepts mixed with benchmarking. Benchmarking is sometimes being used in the same meaning with competitive analysis. However, the aim of competitive analysis is to reveal what results the organization has achieved compared to its competitors. However, in benchmarking, it is essential to provide detailed information about how an organization achieves the best results (Smith, Ritter & Tuggle III, 1994). Table 1 shows the differences between competitive analysis and benchmarking.

Table 1. *The differences between competitive analysis and benchmarking*

Competitive analysis	Benchmarking
Looks at the results.	Looks at processes.
Checks what's going on.	Controls how things are done.
Makes comparisons within the sector.	Makes comparisons with different sectors.
Conducts research without sharing.	Conducts research with mutual gains principle.
Always competitive.	It may not be competitive.
It is maintained in secrecy.	Sharing is essential.
Works separately.	Works with the understanding of partnership.
It is independent.	Cooperation is based on mutual agreement.
It is used to control competition.	It is used to achieve development goals.
The aim is to corporate knowledge.	The aim is to process information.
Focuses on organization's needs.	Focuses on customers' needs.

Reference: Smith, G. A., Ritter, D., Tuggle III, W.P. (1994). Benchmarking: The fundamental questions. *Marketing Management*, 2(3), p.47.

While competition analysis focuses on finished products or outputs, benchmarking focuses on processes (Karalar & Sınmaz, 1998). Benchmarking is not a competitive analysis, nor just a copying technique (Ertürk, 2009). In copying, a certain application is taken in the same way without any learning or examination of its suitability for the organization (Küçük, 2012). However, benchmarking emphasis on learning and adaptation of the application. Different from copying, benchmarking is an inspiration for organizations to achieve new goals and make new inventions (Çatı et al., 2007; Ertürk, 2009). Benchmarking should also not be perceived as industrial espionage, a tourist trip to other organizations, a

competitive analysis, or a marketing research (Kalder, 1997). Furthermore, benchmarking should not only be considered as a measurement study. The presence of numerical data in the benchmarking application does not indicate that benchmarking consists only of comparing numbers or measuring the indicators of the benchmarking partner (Küçük, 2012). Benchmarking is not a simple and inexpensive management tool that can be realized in a short time (Kalder, 1997).

As a result, benchmarking is an approach beyond these expressions and concepts and is a technique aimed at improving quality and providing a competitive advantage. For this reason, it is considered an extremely useful continuous improvement tool (Genç, 2007) and a management technique used to improve organizational performance (Şimşek, 2007). Benchmarking is an examination of best practices that will lead to superior performance and can be applied to all levels and processes of the organization. Benchmarking improves organizational performance by improving the whole system or some parts of it (Akat et al., 1999). In short, benchmarking is characterized as a guide, program determinant, and standard protector for organizations to find the answer to where they are now, where they expect to be, and how they will get there (Şimşek, 2007).

History of benchmarking

The first applications of benchmarking worldwide were carried out in Japan (Demirdöğen & Küçük, 2003). In Japanese, the word *dantotsu* is used instead of benchmarking. The word "Dantotsu" means striving to be the best of the best. This word reflects that benchmarking is a positive and proactive process that requires a planned change of organizational practices to achieve better performance (Camp, 1992). The first systematic study of benchmarking was conducted by Xerox in America in 1979 (Genç, 2007). While the company was the market leader in the copying machine market, it began to lose market share due to increased competition and feel the pressure of its competitors (Elmuti & Kathawala, 1997). For this reason, the company decided to start a study that would compare production fees in America with foreign and domestic competitors. This study showed that competitors sold their products at the same price as Xerox's production cost. Xerox has started the benchmarking process to identify this large performance gap between its competitors and determine how to reduce and eliminate this gap. Although benchmarking results show that Xerox is significantly behind its competitors, the company has achieved great success with this study (Küçük, 2012). Then, Xerox adopted benchmarking as a company-wide application, not just on production operations. Xerox today uses benchmarking as a key element of its total quality works. In addition, the company has expanded its benchmarking works to include analysis of good practices in any industry (Camp, 1992).

After Xerox, many successful national and international companies such as LL. Bean, Alcoa, Motorola, AT&T, Florida Power & Light, General Electric, Toyota (Longbottom, 2000), Beko Elektronik, Eczacıbaşı (Bedük, 2002) have used benchmarking technique in their quality development processes. In 1991, International Benchmarking Clearinghouse (IBC) was established within American Productivity and Quality Center (APQC) in Houston, Texas to support, facilitate and improve benchmarking techniques worldwide due to the rapid expansion of the benchmarking method and the increase in the number of applications. Today, quality awards in Europe and America require organizations to apply the benchmarking technique (Grayson, 1992). For example, Malcolm Baldrige Quality Award and European Quality Award, which are internationally recognized and respected quality awards, use benchmarking as an evaluation criterion (Bedük, 2002). For this reason, organizations often apply to the benchmarking method as part of quality and performance improvement tools in their Quality Management Systems. Therefore, the benchmarking technique has become a new approach used in defining organization goals and is becoming increasingly common (Şimşek, 2007).

Types of benchmarking

Benchmarking studies can be performed for all activities, products, services, functions and business processes in an organization (Düren, 2002). Because benchmarking can be applied in many different dimensions in organizations, there are many types of benchmarking in the literature. Some examples of benchmarking classifications were shown in Table 2.

Table 2. *Some examples of benchmarking classifications*

Author	Benchmarking classification
Camp (1993)	Internal benchmarking Competitive benchmarking Functional benchmarking
Yasin and Zimmerer (1995)	Internal benchmarking Competitive benchmarking Functional/generic benchmarking
Elmuti and Kathawala (1997)	Internal benchmarking Competitive benchmarking Functional/Industry benchmarking Process/generic benchmarking

As can be seen in Table 2, there is no consensus between benchmarking classifications among researchers. However, it is possible to examine benchmarking types according to two basic elements. These elements are what the focus is on benchmarking practice and who the benchmarking partner is (Özer, 1999). Thus, benchmarking types can be examined under two main groups according to the point of focus and the selected partner (Pekdemir, 2000).

The first one of the benchmarking classifications is related to what the organization's goal is to make benchmarking. Organizations may benchmark a product/service, a process in which a product or service has produced, or strategies beyond the product and process (Özgür, 2011). In other words, this classification uses focus of the benchmarking study as criteria and reveals 3 different types of benchmarking. These are product-oriented benchmarking, process-oriented benchmarking and strategic benchmarking (Akat et al., 1999; Çatı et al., 2007; Özer, 1999; Özgür, 2011).

- *Product-oriented Benchmarking*: Products produced by other organizations are the focus of product-oriented benchmarking, the oldest and most commonly used type of benchmarking. The organization examines products by breaking them into pieces (Bolat et al., 2008). The first benchmarking study conducted by Xerox in the United States can be shown as an example of product-oriented benchmarking. In order to get the desired benefit from product-oriented benchmarking, products to be benchmarked must have similar characteristics. In the application of this type of benchmarking, the organization can benefit from many ways, such as purchasing product, using or observing the service, collecting data from outside, or cooperating with other organization (Bolat et al., 2008).
- *Process-oriented Benchmarking*: It is also named as functional or generic benchmarking in the literature (Bedük, 2002). It focuses on the best business processes (Elmuti and Kathawala, 1997). The goal of process-oriented benchmarking is to determine how an organization known for its excellence has reached this point in the process of benchmarking to adapt the successful aspects of this process to the organization and to improve the performance of the selected process.

(Akat et al., 1999). This type of benchmarking can be done with a direct competitor, or with an organization in a completely different sector, having similar processes. It is a great advantage of process-oriented benchmarking that it is easy to find an organization to cooperate with in case of organizations are not in same competition sector (Yatkin, 2003). Process-oriented benchmarking is considered a very effective method, but it is quite difficult to implement because it requires the conceptualization of all processes in the organization and a thorough understanding of procedures (Freytag & Hollensen, 2001).

- *Strategic Benchmarking*: It simply examines how organizations compete (Eryılmaz, 2009). In strategic benchmarking, it is essential to benchmark different organizational strategies to identify key elements of a successful strategy. The goal of strategic benchmarking is to identify strategies behind successful organizations. This kind of work is very important for organizations to make basic decisions that are guiding, especially in their medium-and long-term activities (Shetty, 1993). In strategic benchmarking, one-to-one comparisons are made between the organization's own strategy and exemplary competitor's strategy. Strategic benchmarking studies address specific problems such as defining goals and objectives in the strategic plan, selecting key business processes for development, and defining areas needed to be developed technologically. The essence of strategic benchmarking is to combine the organization's planning process with the strategic benchmarking process. This combination supports development of main goals by top management and guides selection of appropriate sub-goals for middle management (Uzun & Yelkikalan, 1997). In addition, through strategic benchmarking, different organizational strategies are examined and the strengths and weaknesses of intra-organizational strategies are tried to be identified (Özalp, 2001). Japanese companies are the leading organizations that implement strategic benchmarking. These companies use strategic benchmarking in their long-term plans to gain and maintain a competitive advantage in accordance with their management understanding (Çatı et al., 2007).

Benchmarking is also divided into 3 groups according to who the partner is. These are internal benchmarking, competitive benchmarking and non-industry benchmarking (Bedük, 2002; Çatı et al., 2007; Özer, 1999).

- *Internal Benchmarking (Intra-organizational Benchmarking)*: It is the benchmarking of internal actions and processes of an organization (Yasin & Zimmerer, 1995). Since it is a type of benchmarking within the organization itself, it is considered the most basic and simplest benchmarking type. The basic assumption of internal benchmarking is that many organizations have similar functions within their departments. Benchmarking common points of departments like metal, machinery, electricity, electronics etc. in a vocational high school or benchmarking between classes in same grades can be shown as examples of internal benchmarking (Kocabaş, 2004). The main purpose of internal benchmarking is to establish organizational performance standards (Freytag & Hollensen, 2001). According to Yasin and Zimmerer (1995), internal benchmarking is a typical starting point of all benchmarking process because organizations should know their business processes, services or products before starting the benchmarking process with other organizations. So, the organization can determine the best practices within its own organization and transfer them to other parts of the organization. Internal benchmarking allows information share within the organization (Elmuti & Kathawala, 1997) and stimulates intra-organization competition (Yatkin, 2003). Also, in internal benchmarking, unlike other types of benchmarking, the leak of information outside the organization is prevented. However, internal benchmarking is often applied in multinational companies and holdings because it is not always possible to find predefined and well-functioning processes that will be benchmarked in small organizations (Ertürk, 2009). If organizations that practice internal

benchmarking do not use internal benchmarking as a basis for external benchmarking, this causes the organization to maintain only an introverted perspective (Freytag & Hollensen, 2001). Therefore, organizations should evaluate these advantages and disadvantages of internal benchmarking before applying it. Briefly, internal benchmarking is only one, maybe the first step to achieve perfection (Saraç, 2005).

- *Competitive Benchmarking:* It is an external action involving the examination of a direct competitor (Yasin & Zimmerer, 1995). Competitive benchmarking means to benchmark products, services and processes of competing organizations in the same sector (Freytag & Hollensen, 2001). In this benchmarking type, best practices are determined by making comparisons with organizations competing in the same sector and they are tried to be adapted to the organization. Therefore, comparability is essential element for competitive benchmarking (Saraç, 2005). Many applications of competitors, such as resource management, internal audit, human resource management, wage and premium systems, purchasing, etc. can be the subject of competitive benchmarking. Moreover, competitive benchmarking can be done simultaneously with multiple organizations (Yatkin, 2003). By competitive benchmarking, organizations get the opportunity to see practices which are different from their own practices (Saraç, 2005). It also gives organizations a long-term perspective. To take expected advantages from competitive benchmarking, being successful of the competing organization in the sector must be paid attention (Çatı et al., 2007). Another point to paying attention about competitive benchmarking must be performed after internal benchmarking was applied. According to benchmarking experts, most organizations fail in their competitive benchmarking efforts because they engage in external actions without fully understanding their own internal work processes. However, internal state of the organization must be documented and analyzed before benchmarked with external data (Yasin & Zimmerer, 1995). The most important problem in competitive benchmarking is the difficulty to obtain information from competing organization due to the concern that it will provide a competitive advantage. The most easily accessible information about competitors are the ones that are publicly available. Another method of obtaining information is to take opinions of competitors' customers, but this method is also considerably costly (Freytag & Hollensen, 2001). For this reason, it is important for the organization, using competitive benchmarking technique, to make the necessary agreements with the organization chosen for benchmarking to avoid from knowledge sharing problems. In this agreement, it should be stated particularly what information will be requested from competitor organization (Çatı et al., 2007).
- *Non-industry Benchmarking:* It is the benchmarking of similar operations, functions and processes of an organization with organizations that are not competing with it (Ertürk, 2009). In this type benchmarking, it is essential that an organization focuses on the best examples in all sectors without limited to its own sector. So, it is evaluated as the most advanced type of benchmarking (Bedük, 2002). An organization with similar technological or marketing characteristics is usually chosen as a benchmarking partner. Similar with competitive benchmarking, non-industry benchmarking focuses on specific functions, too (Elmuti & Kathawala, 1997). Services, productions and business processes can be focus of non-industry benchmarking practices. Benchmarking of teaching methods used in the Education Department of any organization and teaching methods in a school can be shown as examples of non-industry benchmarking (Turhan, 2002). One of the important advantages of non-industry benchmarking is that the number of organizations which can be selected as benchmarking partners increases (Bedük, 2002). In addition, in this type of

benchmarking, since the organization does not directly face a competing organization, benchmarking partners are more willing to share information and collaborate. However, organizations, chosen often as benchmarking partners for non-industry benchmarking applications, can evaluate the cost and time spent on such benchmarking as a disadvantage (Elmuti & Kathawala, 1997).

Benchmarking types can also be classified as intra-sector and cross-sector according to selected benchmarking partner. According to this classification, internal benchmarking and competitive benchmarking are intra-sector benchmarkings, and non-industry benchmarking is cross-sector benchmarking. Yasin and Zimmerer (1995) state that regardless of benchmarking type, the benchmarking process consist of similar phases. Therefore, organizations should carefully evaluate what they will benchmark and how they will implement this process in accordance with their own needs. This assessment is one of the most effective methods for initiating benchmarking practices (Elmuti & Kathawala, 1997).

Stages of benchmarking process

Benchmarking technique is an extroverted and systematic process that allows the organization to identify, analyze and use the best practices and then measure them. Furthermore, the basis of this technique is research and understanding (Akat et al., 1999; Şimşek, 2007). Benchmarking is a comprehensive practice that requires some stages to be completed to determine the best practices of other organizations and adapt them to the organization (Özalp, 2001). However, in the literature, the stages of benchmarking process are classified and named differently by authors and institutions. Some examples of stages of the benchmarking process in literature were presented in Table 3.

Table 3. *Some examples of stages of the benchmarking process in literature*

Author/Institution	Stages of Benchmarking Process
Camp (1992)	<ol style="list-style-type: none"> 1. Planning 2. Analysis 3. Integration 4. Action 5. Maturity
Yasin and Zimmerer (1995)	<ol style="list-style-type: none"> 1. Think 2. Act 3. Evaluate 4. Plan 5. Look ahead
Kalder (1997)	<ol style="list-style-type: none"> 1. Preparation 2. Data collection and analysis 3. Application 4. Review and development

Table 3 (Continued). *Some examples of stages of the benchmarking process in literature*

Author/Institution	Stages of Benchmarking Process
Xerox (as cited in Özer, 1999)	<ol style="list-style-type: none"> 1. Determining of benchmarking subject 2. Determining of benchmarking partner 3. Determining of information collection methods and collecting information 4. Determining the current competitive deficiency 5. Determining future performance 6. Analyzing findings 7. Forming functional objectives 8. Implementing action plans 9. Monitoring progress of action plans 10. Reapplying benchmarking

In Table 3, it is seen that researchers and practitioners focus on different benchmarking stages in benchmarking process, but these stages basically involve the same processes (Çatı et al., 2007). In this context, it is possible to summarize the benchmarking process as 4 stages. These are planning, analysis, integration and action (Ağaç, 2001; Düren, 2002).

Planning stage

Planning stage includes determining the activity to be benchmarked, determining the organization to be benchmarked, determining data collection methods and collecting data (Camp, 1992). Determining the activity to be benchmarked is important in terms of effective usage of resources and effect of results on goals, success and continuous improvement of the organization (Kalder, 1997). Each activity in organizations offers a number of outputs such as products, services, or methods. For this reason, all organizational activities can be determined as benchmarking subjects in benchmarking process aimed at improving organizational performance (Camp, 1992). However, it is recommended to select activities that are important in providing a competitive advantage to the organization (Shetty, 1993). At the planning stage, firstly critical business processes are determined in the organization. Then, success factors affecting these business processes are identified. After these processes and factors are identified, they are measured using an existing or newly developed measurement tool in accordance with the purpose. The reason why standardized measurements are made is to ensure effectiveness of benchmarks which will be made to determine processes that the organization needs to develop. As a result of comparing measurement results, processes that need to be worked on for development of the organization are determined (Fong et al, 1998).

The second step is to identify the best performing organizations for benchmarking. The main problem in benchmarking studies is to investigate best organizational practices and choose a benchmarking partner having these practices. But a common mistake, named as "Halo effect" is made in choosing a benchmarking partner. This mistake results from the assumption that a famous organization is successful in all areas and excellent in all aspects without exception (Fitz-enz, 1992). However, best practice on the subject to be benchmarked can be found in any organization. For this reason, according to benchmarking subject, organizations should make a list of all possible benchmarking partners, including direct competitors and organizations that are considered best in their sector. This method is especially useful for organizations that do not have a direct competitor, such as public organizations. Then, members of benchmarking team should collect information from all sources about possible benchmarking partners

(Fong et al, 1998). After benchmarking partner has been identified, the organization should contact the partner and ask partner whether wants to participate in the study. The organization should clearly state to the partner why it was chosen as a benchmarking partner, goal of the study, expected achievements, needed time and information sharing rules. The next step is to determine data collection methods and then to collect data. Purpose of data collection is to find answers to questions such as why practice of benchmarking partner is better, what can be learned from it, and how these learnings can be adapted. The most common data collection methods are study visit, correspondence/survey and telephone call (Kalder, 1997). Each of these methods has its own advantages and disadvantages. By considering pros and cons of these methods, organizations should determine appropriate method of data collection for themselves. Then, necessary data is collected from the benchmarking partner with this method.

Analysis stage

At the analysis stage, studies are carried out to identify the performance gap between the organization and leading organizations or important competing organizations and to determine performance goals to be achieved (Camp, 1992). The basis of analysis depends on complete understanding of both organization's own processes and benchmarking partner's processes. Data analysis should focus on processes and applications rather than just results. At the analysis stage, firstly, differences between measurements are determined by comparing data obtained from the benchmarking partner and organization's own data. Thus, performance gap between organization and benchmarking partner is defined (Shetty, 1993). The performance gap can be defined as negative, positive, or equal. The negative performance gap indicates that observed performance or practices of benchmarking partner are better than the organization itself. In this case, organization should focus on causes that make the difference, so it can select and improve the most important of them. Equal performance gap means that there is no obvious difference between organization and benchmarking partner in the chosen subject. In this case, instead of ending benchmarking, it is recommended that continuous observations should be made so that competitors can continue to constantly improve. The positive performance gap indicates that organization has superior performance or practices than its benchmarking partner (Düren, 2002). In this case, goal of the organization should be identifying ways to maintain superiority (Shetty, 1993). Next step after determining the performance gap is to define future performance goals based on this result. Defining future performance goals refers to defining the situation that the organization wants to achieve. As well as accurate analysis of the performance gap in the benchmarking process, realistic determination of future performance goals is important for effectiveness of the studies to be carried out (Düren, 2002).

Integration stage

Integration stage includes activities like explaining benchmarking results, ensuring agreement between members of the organization and establishing functional goals. Participation of employees and support of top management are necessary for benchmarking practice. Benchmarking practice can be successful if the support of employees and top management is provided and they adopt benchmarking results. Therefore, employees must be informed about results obtained from planning and analysis stages of benchmarking and the desired goals to be achieved (Küçük, 2012). After informing, employees should be given enough time to evaluate benchmarking results and agree on the desired goals (Shetty, 1993). A consensus should be reached on benchmarking results in line with suggestions and criticisms of employees. Thus, it is possible to increase commitment of employees to the benchmarking process (Fong et al., 1998). The next step in integration phase is to convert performance goals into functional goals. Functional goals can be defined for the whole organization or a unit of it. It is proposed to define functional objectives in a hierarchical order from top management to base (Düren, 2002).

Action stage

Action stage includes activities such as preparing action plans to achieve desired goals in benchmarking subject, implementing them, monitoring their progress and evaluating success (Camp, 1992). Organizations should prepare specific action plans such as improving product design, quality control, or packaging to achieve their goals. Action plans should also cover who the team to implement the plan consists of, what areas to focus on, which activities to be organized and what support activities are needed. In addition, issues such as required resources, legal responsibility and timeline for implementation process should also be specified in action plans. If the relationship between action plans, goals and mission of the organization is explicit and there is no mismatch between them, action plans will be implemented more effectively. To solve possible problems that may arise in this process, progress must be monitored (Fong et al., 1998). Thus, if performance level is not sufficient to achieve desired goals, a number of recovery actions can be applied. Feedbacks obtained from monitoring also help to set new performance goals (Shetty, 1993).

Shortly, since benchmarking is a cyclical and dynamic process, it is essential to constantly review application results, spread positive results all over the organization and initiate new benchmarking activities for continuous improvement (Düren, 2002). In this context, benchmarking is an endless process aimed at continuous development (Ertürk, 2009). The last point to be reached in the benchmarking technique is spread of benchmarking to all areas of the organization and its institutionalization within the organization. For this reason, the organization must keep up with the constant change in its sector by constantly benchmarking and updating the organization's practices (Camp, 1992).

Advantages and disadvantages of the benchmarking process

Benchmarking is a managerial tool which makes possible getting knowledge about the methods, processes and practices used by other organizations, defining higher level of objectives according to this knowledge and developing new ideas and methods to achieve these objectives to get better results. This tool generally serves such objectives of organizations as providing competitive advantage, increasing customer satisfaction, developing new ideas, defining goals, improving organizational performance and making strategic planning (Akat et al., 1999). Benchmarking, as an evaluation method, makes comparing performance levels possible, provides new information as input to the organization continuously and shows how to achieve perfect performance by defining reasons which are keys to success of leading organizations (Yatkin, 2003). In this regard, usage of benchmarking technique helps organizations to evaluate their resources more rationally and function more successfully (Çatı et al., 2007). Hence, benchmarking has lots of advantages for the organization which uses this technique depending on areas being used.

Organizations could get both financial and non-financial advantages via a successful implementation of benchmarking. Financial advantages of benchmarking are generally about cost and time. Reasons of this situation are adaptation of the best processes and implementations of benchmarking partners to the organization and disposal of challenges which planning, testing and implementing firstly bring (Genç, 2007). On the other hand, non-financial advantages of benchmarking are as following (Pekdemir, 2000):

- Defining and evaluating crucial processes,
- Making competition analysis and market search,
- Finding the best organizations both in sector and out of sector,
- Wishing to have best practices,
- Developing learning culture and being a learning organization,

- Developing short-term and long-term plans,
- Preparing strategic plans,
- Creating new ideas by getting out of organization's usual practices,
- Finding the opportunity of comparing products, outcomes and processes with the organizations which have the best practices or with the competitors,
- Providing satisfaction for customers,
- Being in the search of the best continuously.

In addition to these advantages, benchmarking has such other practical advantages as defining customer needs and efficient goals, developing proper productivity criteria, achieving the best by creating competition and to make technology-transfer easy (Genç, 2007). Besides the organizations using benchmarking, this technique has some advantages for benchmarking partners, too. These are as following:

- ✓ Assessing the organization in different ways,
- ✓ Realizing the aspects which need to be improved,
- ✓ Learning the implementations of other organizations,
- ✓ Learning the benchmarking process and using it in future (Pekdemir, 2000).

As seen, benchmarking is a process which provides mutual advantages for the sides who take part in benchmarking process. But to take these advantages, it is important to consider some basic principles during the benchmarking process. These basic principles are mutuality, similarity, measurement and accuracy (Yatkin, 2003).

- **Mutuality:** Participants should take advantage from each other. Only one side should not be gaining.
- **Similarity:** Processes being examined should have similarities and comparable features for the success of benchmarking technique.
- **Measurement:** Benchmarking is a measurement technique. Main purpose of this technique is to learn how to achieve high performance on examined fields. So, measurements should be systematic and objective.
- **Accuracy:** Data being used should be objective and reliable. Using predictive and subjective evaluations should be avoided.

In brief, first of all adopting these basic principles is a necessity to achieve desired results from benchmarking process. Besides adopting these basic principles, obeying some rules increases the success chance of benchmarking technique, too. Some of these rules are approaching benchmarking technique as a team work, implementing it under the leadership of top management, knowledge sharing among members, diffusion of learning culture around the organization and considering the interests of benchmarking partner (Bolat et al., 2008; Efil, 2010). However, failure of benchmarking can be based upon some other reasons rather than not obeying these rules. Some of these reasons are not having adequate knowledge, skills and coordination of benchmarking team to operate effectively, focusing on results rather than process, not planning the process appropriately, not generating an efficient learning structure (Karalar & Sinmaz, 1998; Özalp, 2001). Additionally, some other reasons as resource deficiencies, starting implementation before truly understanding benchmarking process and taking necessary trainings, not ensuring the integrity of management and organization, choosing wrong partner, ignoring alternatives, trust-related concerns and time constrains can cause the failure of benchmarking process (Genç, 2007). So, it is really important to learn about the basic principles and rules of benchmarking technique before implementation and to take attention to these principles and rules during implementation.

It is obvious that benchmarking technique which means examining organizations and adapting their most effective practices have lots of advantages for organizations. On the other hand, this technique also has some limitations. Some of these limitations are ignoring what customers truly want, not giving any information about the employees' situation during the implementation, bringing high travel expenses, necessitating an efficient communication structure and giving so much information to competitors (Küçük, 2012). However, when the advantages and disadvantages of benchmarking technique are compared, it is clear that advantages for organizations are more. So, it can be said that implementing benchmarking technique by choosing a benchmarking data gathering type which is appropriate for the goals and resources of the organization will be useful for organizations to develop and achieve better results.

Benchmarking in educational organizations

Camp (1992), who has leaded development of benchmarking technique in the field of management science defines the main aim of this technique as to increase success change of the organization by providing competitive advantages to the organization. In this sense, benchmarking aimed at improvements in manufacturing sector when it first came out. However, success of benchmarking in manufacturing sector has raised the idea of using this technique in other sectors (Kocabaş, 2004). Today, it is used in several sectors such as education, health, security and service. A study conducted in England shows the usage levels of benchmarking technique in different sectors. Table 4 presents the usage prevalence of benchmarking technique in different sectors according to the mentioned study.

Table 4. *Prevalence of benchmarking technique in different sectors (Holloway, Francis, Hinton, Mayle, 1998)*

Sector	Total number	Number claiming to be benchmarking
Government	55	32 (58%)
Education	37	23 (62%)
Health	52	36 (69%)
Manufacturing and construction	269	135 (50%)
Financial services	57	19 (33%)
Service and retailing	189	68 (36%)
Utilities	18	14 (78%)
Others	49	19 (39%)

As seen in Table 4, education sector is ranked as the second among of organizations using benchmarking in England. Reason of this situation is that the only aim of benchmarking is not getting competitive advantage. Yet, an apparent competition doesn't exist among educational organizations which are within the structure of a centralized education system. However, since benchmarking is a tool to keep up with change and to achieve better performance (Kocabaş, 2004), it could be a useful tool for educational organizations, too. In this regard, it can be said that usage of benchmarking is a necessity for educational organizations. Kocabaş (2004) explains this necessity with the reasons presented below:

- Results being achieved/not achieved,
- Complaints from students, parents and school environment,
- Acceptability level of implementations in educational organizations,
- Changes in performance measurements,
- Changes in task priorities,

- Changes in mission, vision and aims of educational organizations,
- Expansion of services,
- Changes in citizens' perspectives about the government,
- Changes in qualifications demanded from education workers.

There are many reasons which make usage of benchmarking in educational organizations a necessity. So, as any other organization, educational organizations need benchmarking, too (Kocabaş, 2004). Benchmarking in educational organizations can be defined as a process of searching the best practices in other educational organizations or in different sectors and adapting these practices. It can be said that using benchmarking as a tool for development by learning from each other or learning from other organizations is quite useful to improve quality for educational organizations. Besides, it can be used as an effective tool at schools to adopt quality management procedures and to keep up with the changes which quality management necessitates (Turhan, 2002).

Benchmarking technique in education is a tool which has the capacity of meeting a wide range of needs from evaluation of educational organizations to defining vision (Turhan, 2002). In this regard, it is possible to use benchmarking technique at schools as serving cross-purposes. Schools can use this technique to adopt changes needed for school improvement and to achieve specific strategic goals faster. Benchmarking can be utilised in education to improve managerial processes and develop teaching methods. Besides, schools can benefit from benchmarking technique while evaluating resource usage (McCathern, 1999). According to Turhan (2002), benchmarking in education can be used as a tool for problem-solving, transforming schools to learning organizations, creating and maintaining competition, making measurements and facilitating change. Additionally, it can be implemented to get knowledge about how to use technology more effectively and to define technology needs of schools (Thornton, 1998). In Turkey, in a qualitative study conducted at a private primary school campus in Eskişehir, the usage areas of benchmarking at primary schools are defined as implementing the educational program of Ministry of Education in classes, making weekend courses, introducing school to the environment, conducting public relations, communicating with students and parents (Keskin, 2017). Shortly, when the usage areas of benchmarking technique in education are considered, it can be said that this technique have both practical and theoretical benefits for educational organizations and so it is really useful for these organizations. The literature also states that using benchmarking in education will provide lots of advantages to schools. These can be summarized as following (Turhan, 2002):

- ✓ Defining society's demands,
- ✓ Defining effective goals for schools,
- ✓ Increasing productivity of schools,
- ✓ Creating competition at schools,
- ✓ Learning and adapting best practices which will increase quality in education.

Epper (1999), who states that benchmarking has a powerful potential to enable schools learn from each other and from other organizations, explains advantages of benchmarking for educational organizations based on benchmarking practices at educational organizations. These are as following (Epper, 1999):

- ✓ Benchmarking not only provides data, but also provides an action plan.
- ✓ It differentiates famous organizations from innovative organizations.
- ✓ It encourages developing different perspectives.
- ✓ It enables new learnings.
- ✓ It increases knowledge about the technique and improves internal processes of the organization.
- ✓ It creates collaboration chance by helping to develop communication networks.

When the educational levels are considered, it can be seen that benchmarking is general related to higher education. Such reasons like increased competition and internationalization pressures on higher education institutions and benchmarking reports published for higher education institutions in OECD countries are among the reasons causing this situation. Besides, factors such as working with concrete data and using scientific methods systematically of higher education employees increase usability of benchmarking technique for higher education institutions when compared to educational levels (Alstete, 1995). Despite of readiness of higher education institutions' employees and possible advantages of benchmarking technique, it can be said that there are not adequate benchmarking implementations at higher institutions (Levy & Ronco, 2012).

DISCUSSION & CONCLUSION

This study makes a literature review about benchmarking and its use in education. As a result, it is revealed that benchmarking, which dates back to 1970s, is a technique used for organizational improvement that can be used in several services such as education, health, security and service etc. According to Elmuti and Kathawala (1997), organizations use benchmarking since it increases productivity and learning, provides growth potential and is a tool of strategy, continuous improvement, performance evaluation and performance improvement. In short, the main aims of organization while using benchmarking are making the necessary changes in the organization and taking necessary precautions to increase competitive advantage (Koçel, 2014). Therefore, it is aimed to achieve the best performance or build a learning and continually improving structure by creating benchmarking process with competitor organizations (Bedük, 2002). Since improving organizational performance and surviving for a long time depend on following the competitor organizations and environment of the organization, it is important for educational organizations to use benchmarking technique systematically like other organizations. Because benchmarking can be used to develop a learning culture, shorten the improvement period, organization goals and budget, solving problem, meeting the necessities of job excellence models and identifying the weaknesses of competitor organizations (Stapenhurst, 2009).

Based on the advantages of benchmarking, it is possible to claim that this technique will lead more effective practices for educational organizations which shape the future of societies and so will contribute to increase quality of outputs of these organizations. However, when literature is examined, it is determined that usage of benchmarking at educational organizations is not so widespread (Thornton, 1998). Studies conducted at educational organizations indicate that benchmarking technique is generally used at higher education institutions (Alstete, 1995; Levy & Ronco, 2012; Thornton, 1998). Reasons of benchmarking usage at higher education lastly are emergence of competition, increase in accountability demands and accumulation of knowledge. Thereby, using benchmarking has become crucial to survive and compete for higher education institutions (Alstete, 1995). According to results of related studies employees of organizations using benchmarking state that it helps organization to overcome the resistance to change, provides a framework for external evaluation and develops new communication networks among schools to share valuable information and experiences (AASCB, 1994, p.16-17 as cited in McCathern, 1999).

Despite of all the advantages of benchmarking technique, it has not taken expected attention from higher education institutions since each institution assumes itself unique, defining and measuring the outputs of educational organizations are difficult, stakeholders' approach to change with suspicion and so do not encourage benchmarking, implementing benchmarking necessitates an expensive and demanding process (Levy & Ronco, 2012). Besides not getting attention from higher educational institutions, some features of benchmarking makes it difficult to be implemented at these institutions. Because benchmarking process necessitates examining themselves deeply, defining weaknesses of the schools

and searching examples from other organizations to improve these weaknesses of school members (Epper, 1999). On the other hand, despite of the challenges implementing benchmarking at educational organizations, when the advantages considered, it could be accepted as a useful technique and should be used to improve at all educational levels.

Lastly, rapid changes encountered at all aspects of life affect educational organizations, as any other organization. So, demands of society from educational organizations get different in time. Educational organizations should keep up with environmental developments, meet the demands, search and find the needed knowledge and practices to go beyond the organization walls. In other words, educational organizations need to become learning organizations. Benchmarking technique is accepted as one of the tools which transforms organizations to learning organizations (Görmüş, 1999). In brief, benchmarking is a managerial tool which can be used while transforming educational organizations to learning organizations. It is possible to keep up with change, learn from each other and so improve performance for educational organizations by using benchmarking technique.

At the end of the study, it can be suggested to conduct empirical studies to test mentioned advantages of benchmarking at educational organizations. Similarly, it can be suggested to quality assurance or benchmarking institutions to prepare prescriptions to guide benchmarking implementations at educational organizations. So, it can be possible for both implementers and researchers to constitute a reference framework for applicability of benchmarking technique at educational organizations. Besides, using benchmarking technique for educational organizations at the same level is important to adopt benchmarking technique and embed it in organizational culture to increase quality of education by considering the advantages and disadvantages of the technique.

References

- Ağaç, S. (2001). Örnek edinme (benchmarking) hazır giyim sektöründe bir uygulama örneği. Yayınlanmamış Doktora Tezi, Gazi Üniversitesi, Ankara.
- Akat, İ., Budak, G., & Budak, G. (1999). *İşletme yönetimi* (3. Basım). İzmir: Barış Yayınları Fakülteler Kitabevi.
- Alstete, J. W. (1995). Benchmarking in higher education: Adapting best practices to improve quality. ASCHE-ERIC Higher Education Report, No. 5. <http://www.ericdigests.org/1997-3/bench.html>.
- Bedük, A. (2002). *Benchmarking*. Ankara: Nobel Yayıncılık.
- Bolat, T., Seymen, O.A., Bolat, O.İ., & Erdem, B. (2008). *Yönetim ve organizasyon*. Ankara: Detay Yayıncılık.
- Camp, R.C. (1992). Learning from the best leads to superior performance. *Journal of Business Strategy*, 13(3), 3-6.
- Camp, R.C. (1993). A bible for benchmarking by Xerox. *Financial Executive*, 49(4), 23-27.
- Çatı, K., Kingır, S., & Mesci, M. (2007). Kıyaslamaya ilişkin teorik bir çalışma. *Elektronik Sosyal Bilimler Dergisi*, 6(21), 147-171.
- Demirdöğen, O., & Küçük, O. (2003). Kıyaslama (benchmarking) süreci ve ürün odaklı kıyaslamaların imalatçı işletmelerde uygulanmasının verimliliğe etkisi. *Atatürk Üniversitesi İktisadi ve İdari Bilimler Dergisi*, 17(3-4), 303-320.
- Düren, Z. (2002). *2000'li yıllarda yönetim* (2. Baskı). İstanbul: Alfa Basım Yayın Dağıtım.

- Efil, İ. (2010). *İşletmelerde yönetim ve organizasyon* (Gen. 11. Basım). Bursa: Dora Yayın Basım.
- Elmuti, D., & Kathawala, Y. (1997). An overview of benchmarking process: a tool for continuous improvement and competitive advantage. *Benchmarking for Quality Management & Technology*, 4(4), 229-243.
- Epper, R. M. (1999). Applying benchmarking to higher education. *Change*, 31(6) 24-31.
- Ertürk, M. (2009). *İşletmelerde yönetim ve organizasyon* (Gen. ve Göz. Geç. 4. Baskı). İstanbul: Beta Yayıncılık.
- Eryılmaz, B. (2009). Kıyaslama (benchmarking) yöntemi ve otel işletmelerinde kullanımına ilişkin teorik bir çalışma. *Hitit Üniversitesi Sosyal Bilimler Enstitüsü*, 2(1), 41-79.
- Fisher, J. G. (1998). *Kıyaslama (benchmarking) yoluyla performans nasıl artırılır?* Ahmet Ünver (Çev.). İstanbul: Rota Yayınları.
- Fitz-enz, J. (1992). Benchmarking best practices. *Canadian Business Review*, 19(4), 28-31.
- Fong, S.W., Cheng, E.W.L., Ho, D.C.K. (1998). Benchmarking: A general reading for management practitioners. *Management Decision*, 36(6), 407-418.
- Freytag, P.V., & Hollensen, S. (2001). The process of benchmarking, benchlearning and benchaction. *The TQM Magazine*, 13(1), 25-34.
- Genç, N. (2007). *Yönetim ve organizasyon: Çağdaş sistemler ve yaklaşımlar* (3. Baskı). Ankara: Seçkin Yayıncılık.
- Görmüş, A. Ş. (1999). Kalite ve verimliliğin eşzamanlı sağlanmasında benchmarking. *Afyon Kocatepe Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 1(1), 21-38.
- Grayson, C. J. (1992). Taking on the world. *The TQM Magazine*, 4(3), 139-143.
- Holloway, J., Francis, G., Hinton, M., & Mayle, D. (1998). Best practice benchmarking: Delivering the goods?. *Total Quality Management*, 9(4-5), 121-125.
- KALDER Benchmarking Uzmanlık Grubu. (1997). *Kıyaslama (benchmarking): Başkalarından öğrenmek*. İstanbul: Kalder Yayınları, No 15.
- Karalar, R., & Sınmaz, S. (1998). Toplam kalite yönetimi açısından örnek edinme (benchmarking) yaklaşımı. *Eskişehir A. Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi*, 14(1-2), 53-90.
- Keskin, U. (2017). Eğitim sektöründe kıyaslama uygulamaları: ilköğretim kurumlarında kıyaslama yönteminin kullanılmasına ilişkin nitel bir çözümleme. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, (26), 736-768.
- Kocabaş, İ. (2004). Eğitim yönetiminde kıyaslama (benchmarking) yöntemi. *Eğitim ve Bilim*, 29(132), 3-9.
- Koçel, T. (2014). *İşletme yöneticiliği* (Gen. 15. Baskı). İstanbul: Beta Yayıncılık.
- Küçük, O. (2012). *Kalite iyileştirmede adım adım kıyaslama (benchmarking)*. Ankara: Seçkin Yayıncılık.

- Levy, G. D., & Ronco, S. L. (2012). How benchmarking and higher education came together. *New Directions for Institutional Research*, 156, 5-13.
- Longbottom, D. (2000). Benchmarking in the UK: An empirical study of practitioners and academics, benchmarking. *An International Journal*, 7(2), 98-117.
- McCathern, E.J.P. (1999). Benchmarking: A case study of the process in mid-sized community colleges in Texas. Yayınlanmamış Doktora Tezi, Texas Tech University, Texas, ABD.
- Özalp, İ. (2001). *İşletme yönetimi*. Eskişehir: Birlik Ofset.
- Özer, P. S. (1999). *Benchmarking*. İzmir: Vizyon Yayınları.
- Özgür, H. K. (2011). Konaklama işletmelerinde stratejik bir yönetim aracı olarak benchmarking (kıyaslama) tekniğinin kullanılmasına yönelik bir alan araştırması. Yayınlanmamış Yüksek Lisans Tezi, İstanbul Üniversitesi, İstanbul.
- Pekdemir, I. (2000). *Benchmarking kıyaslayarak öğrenmek*. İstanbul: ARC Yayınları.
- Saraç, O. (2005). Benchmarking ve stratejik yönetim. *Sayıştay Dergisi*, 56, 53-77.
- Shetty, Y. K. (1993). Aiming high: Competitive benchmarking for superior performance. *Long Range Planning*, 26(1), 39-44.
- Smith, G. A., Ritter, D., Tuggle III, W.P. (1994). Benchmarking: The fundamental questions. *Marketing Management*, 2(3), 43-48.
- Stapenhurst, T. (2009). *The benchmarking book: A how-to-guide to best practice for managers and practitioners*. Oxford: Elsevier.
- Şimşek, M. (2007). *Toplam kalite yönetimi* (5. Basım). İstanbul: Alfa Basım Yayın Dağıtım.
- Thornton, T.L. (1998). The use of benchmarking to measure indicators to measure indicators of high technology performance in a K-12 international school. Yayınlanmamış Doktora Tezi, University of Minnesota, Minnesota, ABD.
- Turhan, M. (2002). Eğitim örgütlerinde kıyaslama (benchmarking). Yayınlanmamış Yüksek Lisans Tezi, Fırat Üniversitesi, Elazığ.
- Uzun, Ö., Yelkikalan, N. (1997). İşletmelerde benchmarking'in önemi ve benchmarking uygulaması yapan işletmelerden örnekler. *A. Ü. İktisadi ve İdari Bilimler Fakültesi Dergisi*, 13(1-2), 311-328.
- Yasin, M. M., Zimmerer, T.W. (1995). The role of benchmarking in achieving continuous service quality. *International Journal of Contemporary Hospitality Management*, 7(4), 27-32.
- Yatkın, A. (2003). *Toplam kalite yönetimi*. Ankara: Nobel Yayın Dağıtım.